

AMENDMENTS TO THE CLAIMS

Please amend the claims as set forth below in marked-up form.

Claims 1-21. (Canceled)

22. (Currently amended) ~~A composite sintered contact component producing method according to Claim 21,~~ A method for producing a composite sintered contact component by integrating a sintered contact material with a cylindrical or substantially cylindrical backing, the sintered contact material containing at least one element selected from the group consisting of Al, Si, Co and Ni, and having 10% by volume or more a Fe base alloy phase which causes an order-disorder transition, the backing being made from an iron base material, wherein the backing is a cylindrical or substantially cylindrical backing, wherein the sintered contact material contains metallic Al which causes expansion of the sintered contact material and 10 to 70 wt % Cu which is used as an element for generating a liquid phase within a high temperature zone to ensure sinter strength and sinter bondability,

wherein a compact made from the sintered contact material is a cylindrical component having an outer diameter equal to or slightly smaller than the inner diameter of the backing,

wherein when the cylindrical component is heated to 900° C or more, being inserted into the backing, (a) the sintered contact material is expanded by heating at a temperature of 800° C or more for a specified period of time and bonded to the backing by utilizing a Cu base alloy liquid phase which has been generated at the expansion temperature, and (b) the sintered contact material is further heated at a temperature of 900° C or more thereby generating more Cu base alloy liquid phase to compact the sintered contact material, and

wherein a third insert material is interposed between the cylindrical or substantially cylindrical backing made from an iron base material and the cylindrical compact made from the sintered contact material and having an outer diameter slightly smaller than the inner diameter of the backing, whereby a liquid phase component is generated which is useful for bonding the sintered contact material to the backing when heating the sintered contact material at 800° C or more so as to be expanded.

23. (Previously presented) A composite sintered contact component producing method according to Claim 22, wherein said third insert material is adjusted such that the whole of it does not become a liquid phase at said bonding temperature of 800°C or more and is an alloy material containing Sn and Cu which exhibit excellent wettability with respect to said iron base material.

24. (Previously presented) A composite sintered contact component producing method according to Claim 22, wherein the backing is provided with a collar and a wear-resistant material or the sintered contact material is integrated with a sliding contact surface of the collar by one means selected from brazing, sinter-bonding and infiltration, simultaneously with the integration of the backing.

25. (Original) A composite sintered contact component producing method according to Claim 24, wherein a high-carbon, high-Cr base alloy sintered material containing at least 1.5 to 3.5 wt % carbon and 5 to 17 wt % Cr is sinter-bonded to the sliding contact surface of the collar simultaneously with the integration of the wear-resistant material or the sintered contact material.

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Previously presented) A method for producing a composite sintered contact component by integrating a sintered contact material with a cylindrical or substantially cylindrical backing, the sintered contact material having 10% by volume or more a Fe base alloy phase which causes an order-disorder transition, the backing being made from an iron base material,

wherein the sintered contact material contains metallic Al which causes expansion of the sintered contact material and 10 to 70 wt % Cu which is used as an element for generating a liquid phase within a high temperature zone to ensure sinter strength and sinter bondability,

wherein a compact made from the sintered contact material is a cylindrical component having an outer diameter equal to or slightly smaller than the inner diameter of the backing,

wherein when the cylindrical component is heated to 900° C or more, being inserted into the backing, (a) the sintered contact material is expanded by heating at a temperature of 800° C or more for a specified period of time and bonded to the backing by utilizing a Cu base alloy liquid phase which has been generated at the expansion temperature, and (b) the sintered contact material is further heated at a temperature of 900° C or more thereby generating more Cu base alloy liquid phase to compact the sintered contact material, and

wherein the backing is provided with a collar and a wear-resistant material or the sintered contact material is integrated with a sliding contact surface of the collar by one means selected from brazing, sinter-bonding and infiltration, simultaneously with the integration of the backing.

30. (Previously presented) A composite sintered contact component producing method according to Claim 29, wherein a high-carbon, high-Cr base alloy sintered material containing at least 1.5 to 3.5 wt % carbon and 5 to 17 wt % Cr is sinter-bonded to the sliding contact surface of the collar simultaneously with the integration of the wear-resistant material or the sintered contact material.